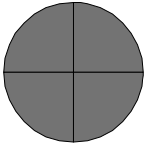
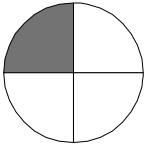
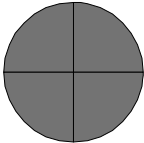
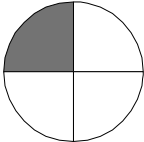


## Opportunities & Needs

## from Trading Places

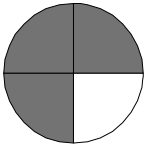
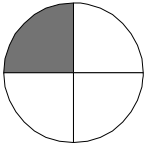
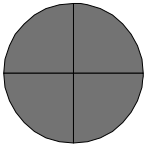
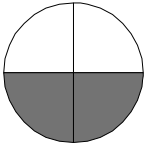
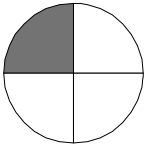
#1 Short Haul Air Transportation System - performs truck and rail road function (because emerging markets leap frog past ground infrastructure); need no be compatible with “legacy infrastructure”; short runway capability; cheap infrastructure support; highly reliable; modular reconfigurable; low ownership and operating cost.

		Why This Score?	Rewrite for a Better Fit?
<b>Pushing the Envelope</b>		Fully compatible.	Only difference is that an short haul system would have to be compatible with the existing system.
<b>Grounded</b>		Commercial applications low, but fits for military needs, some special vehicles	
<b>Regional Tensions</b>		Fit.	To address need to bolster intra-regional transport needs.
<b>Environmentally Challenged</b>		Need in relevant but approach doesn't work.	

## Opportunities & Needs

## from Trading Places

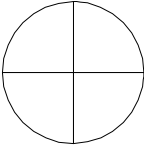
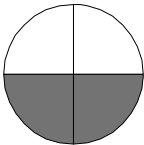
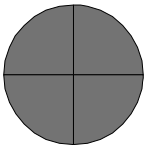
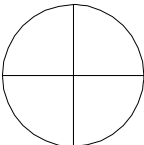
#2 Long Haul - A: subsonic - harmonized ATC, high capacity, fun, comfortable; B: supersonic - might be a market, small aircraft.

		Why This Score?	Rewrite for a Better Fit?
<b>Pushing the Envelope</b>		Subsonic fits, but need a SST in this world for speed and convenience.	Add large SST and faster subsonic.
<b>Grounded - A: Large Subsonic</b>		Eliminate large subsonic component.	
<b>Grounded B: Small Supersonic</b>		Direct compatibility with small supersonic.	
<b>Regional Tensions</b>		No need for large subsonic.	Bolster need for supersonic and maybe larger capacity.
<b>Environmentally Challenged</b>		Need big aircraft, but has to be no frills.	

## Opportunities & Needs

## from Trading Places

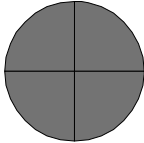
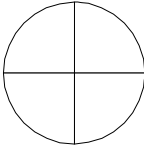
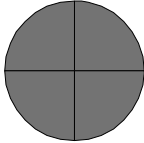
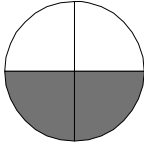
#3 Aircraft that do not require airports - to accommodate lacking airports in emerging markets.

		Why This Score?	Rewrite for a Better Fit?
<b>Pushing the Envelope</b>		Passengers want and can afford the airport infrastructure.	
<b>Grounded</b>		World needs fast in/out, but for smaller aircraft, "SOF" aircraft.	Prefect for need for personal aircraft, not cargo.
<b>Regional Tensions</b>		Some need identified.	To expand markets in undeveloped countries.
<b>Environmentally Challenged</b>		No fit, no need.	

## Opportunities & Needs

## from Trading Places

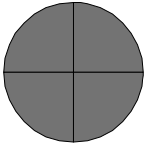
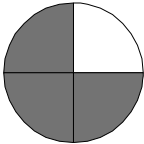
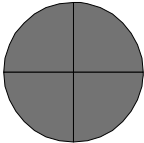
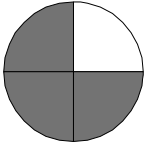
#4 Reconfigurable air transport products - flexibility that supports passenger, cargo and customized performance to address lack of infrastructure; design for disassembly, modularity, open architecture, long service life; address diverse manufacturing in Asia and need for different aircraft types.

		Why This Score?	Rewrite for a Better Fit?
<b>Pushing the Envelope</b>		Excellent match!	For highly consumer and customer responsive aircraft.
<b>Grounded</b>		Not an issue in this world.	
<b>Regional Tensions</b>		Picks up on needs identified.	Discuss enablers.
<b>Environmentally Challenged</b>		Some need for reconfigurability but can't afford to be as flexible as Trading Places.	Rewrite to consider fuel cost implications of flexibility.

## Opportunities & Needs

## from Trading Places

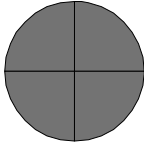
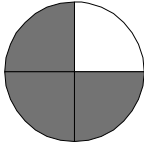
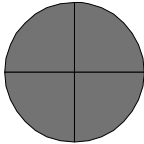
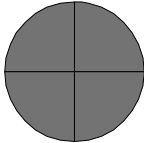
#5 Safety, Increased Traffic Requires Safety Improvements that are Acceptable to Middle Class Asia World - smart systems, integrated total system with minimal reliance on regulation and specialized support and operation (minimize need for trained pilots); self diagnostics utilized for safety; short haul to redefine approaches to safety.

		Why This Score?	Rewrite for a Better Fit?
<b>Pushing the Envelope</b>		Needs all this, real need to reduce accident rates.	
<b>Grounded</b>		Close hit on general aviation concept.	As applied to general aviation and terrorism avoidance first.
<b>Regional Tensions</b>		High degree of overlap, these technologies relevant.	
<b>Environmentally Challenged</b>		Some technologies help save fuel.	Focus on need to save fuel, not safety. Address China leap frogging issue. Smart systems to maximize fuel utilization.

## Opportunities & Needs

## from Trading Places

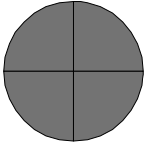
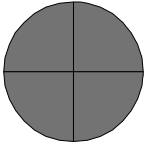
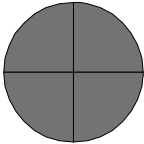
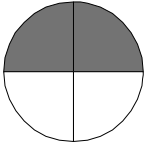
#6 Air Transportation System Integration - improve performance in airports, aircraft, maintenance, spares (depot), ATC, other modes of transportation; information systems integration; data link with communication satellites for all aircraft systems.

		Why This Score?	Rewrite for a Better Fit?
<b>Pushing the Envelope</b>		Perfect fit.	No need to rewrite.
<b>Grounded</b>		Need to avoid large hub-and-spoke airports, need point-to-point.	Address need for point-to-point and support for small planes.
<b>Regional Tensions</b>		Relevant need.	
<b>Environmentally Challenged</b>		Helps conserve CO <sub>2</sub> .	Rewrite to increase system efficiencies for fuel conservation.

## Opportunities & Needs

## from Trading Places

#7 Technical Excellence in Aircraft Manufacturing - need driven responsive research that can be implemented rapidly; virtual factories; automation replaces specialized operations; customized for Asian applications.

		Why This Score?	Rewrite for a Better Fit?
<b>Pushing the Envelope</b>		Good match.	Address need for short cycle times through better modeling.
<b>Grounded</b>		Fits well with weird nature of world, high technology orientation.	Different applications to address security issues and technology to utilize sophisticated information systems.
<b>Regional Tensions</b>		Identical need identified.	To achieve regional superiority.
<b>Environmentally Challenged</b>		Is “motherhood” in all worlds, but some fuel savings can be realized.	